**PRODUCT SPECIFICATION**

**APPLICATION SPECIFICATION**

**MODEL NAME**

**DESCRIPTION**

**NOTES:**

1. **MATERIALS:**
   - **HOUSING:** THERMOPLASTIC, FLAMMABILITY RATING UL 94V-0.
   - **SHIELD:** BRASS 0.20mm THICK, PREPLATED WITH 0.76um MIN SEMI-BRIGHT NICKEL. SOLDER TABS POST DIPPED WITH 2.54um MIN SOLDER.
   - **CONTACTS:** PHOSPHOR BRONZE 0.46mm X 0.30mm, PHOSPHOR BRONZE, 1.27um MIN NICKEL UNDERPLATE, WITH 1.27um MIN GOLD PLATING AT MATING INTERFACE AND 2.54um MIN MATTE TIN ON SOLDER TAILS
   - **SOLDER TAILS:** 0.25mm THICK, PHOSPHOR BRONZE, 1.27um MIN OVERALL NICKEL UNDERPLATE, 3um TIN PLATE

2. **MAGNETICS:**
   - **APPLICATION:** 10/100/1000 BASE-T, EXTENDED TEMPERATURE
   - **IMPEDANCE:** 100 OHMS
   - **TURNS RATIO (CHIP:CABLE):** 1:1 ALL FOUR PAIRS
   - **OPEN CIRCUIT INDUCTANCE (OCL):** 350uH MIN. @100kHz, 0.1VRMS, 8mADC BIAS FROM -40°C TO +85°C, ALL FOUR PAIRS
   - **COMMON MODE REJECTION RATIO (CMRR):** 30dB MIN. FROM 0.5MHz TO 100MHz
   - **CROSSTALK ATTENUATION:** 35dB MIN. FROM 0.5MHz TO 40MHz
   - **33-20LOG(f/50)dB MIN. FROM 40.1MHz TO 100MHz
   - **ISOLATION VOLTAGE:** 2250VDC FOR 60 SECONDS WITH A RISE TIME OF 500 V/SEC
   - **ISOLATION VOLTAGE:** 1500VAC (MAX) AT 60Hz FOR 60 SECS
   - **OPERATING TEMPERATURE:** FROM -40°C TO +85°C.
   - **INDUCED MAGNETIC CONDITIONS ARE SYMMETRICAL TO SUPPORT AUTO-MDI/MDIX.

3. **PERFORMANCE @ 25°C:**
   - **INSERTION LOSS (IL):** 1.1dB MAX. FROM 0.5MHz TO 100MHz
   - **RETURN LOSS (RL):** 18dB MIN FROM 0.5MHz TO 40MHz
   - **33-20LOG(f/50)dB MIN. FROM 40.1MHz TO 100MHz
   - **COMMON MODE REJECTION RATIO (CMRR):** 30dB MIN. FROM 0.5MHz TO 100MHz
   - **ISOLATION VOLTAGE:** 2250VDC FOR 60 SECONDS WITH A RISE TIME OF 500 V/SEC
   - **ISOLATION VOLTAGE:** 1500VAC (MAX) AT 60Hz FOR 60 SECS
   - **OPERATING TEMPERATURE:** FROM -40°C TO +85°C.

4. **RECOMMENDED SOLDERING PROCESS:**
   - **PREHEAT TEMPERATURE IS 120°C TO 160°C, 120 SECONDS TO 180 SECONDS, PEAK WAVE SOLDERING TEMPERATURE IS 260°C MAX, 10 SECONDS MAX.
   - **RECOMMENDED SOLDERING PROCESS:** PEAK SOLDERING TEMPERATURE IS 260°C MAX, 10 SECONDS MAX, OVER 230°C WITHIN 40-60 SECONDS.

5. **DECOUPLING CAPACITOR C1 IS OPTIONAL**

6. **PART PACKAGE METHOD:** TRAY

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**SCALE 4:1**

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